

Technical Report No. 12

**ORGANIZATION AND FINANCING OF
RURAL SOCIAL INSURANCE IN ECUADOR
SEGURIDAD SOCIAL CAMPESINO**

Submitted to:

**USAID Mission to Ecuador
and
Policy and Sector Reform Division
Office of Health and Nutrition
Center for Population, Health and Nutrition
Bureau for Global Programs, Field Support and Research
Agency for International Development**

By:

**Dieter K. Zschock, PhD
Jazmina Estupiñan, PhD
Consultants, Abt Associates Inc.**

November 1994

HEALTH FINANCING AND SUSTAINABILITY (HFS) PROJECT

**ABT ASSOCIATES INC., Prime Contractor
4800 Montgomery Lane, Suite 600
Bethesda, MD 20814 USA
Tel: (301) 913-0500 Fax: (301) 652-3916
Telex: 312638**

**Management Sciences for Health, Subcontractor
The Urban Institute, Subcontractor**

AID Contract No. DPE-5974-Z-00-9026-00

ABSTRACT

This exploratory study examines the organization and financing of Ecuador's Rural Social Insurance Program (SSC), a dependency of the Ecuadorian Institute of Social Security (IESS). SSC operates over 500 health centers that provide basic health services to 153,000 rural households that—through their community organizations—contribute monthly payments. The study argues that IESS and the Government, which co-finance SSC, need to review SSC separately from current proposals for the reform of IESS. SSC's program is experiencing administrative and financial difficulties. Personnel appointments and procurement of basic medicines, administered by IESS, are bottlenecks in SSC operations; SSC is also internally inefficient in its management of human and financial resources. The study summarizes these problems, provides an analysis of SSC financing, and offers recommendations.

CONTENTS

LIST OF EXHIBITS	iii
ACRONYMS	iv
ACKNOWLEDGMENTS	v
EXECUTIVE SUMMARY	vii
1.0 INTRODUCTION	1
2.0 ORGANIZATION	3
3.0 FINANCING	7
4.0 CONCLUSIONS AND RECOMMENDATIONS	10
4.1 SSC PROGRAM ORIENTATION	10
4.2 MEDICAL STAFF RECRUITMENT	10
4.3 COMMUNITY SUPPORT	11
4.4 ADMINISTRATIVE LEADERSHIP	11
4.5 IESS FINANCIAL MANAGEMENT	12
4.6 SSC FINANCIAL MANAGEMENT	12
4.7 LEVEL AND COMPOSITION OF FINANCING	13
ANNEXES	14
ANNEX 1: LAW OF OBLIGATORY SOCIAL INSURANCE	15
ANNEX 2: ESTIMATING HOUSEHOLD INCOME IN RURAL AREAS TO DETERMINE "ABILITY TO PAY" FOR HEALTH SERVICES	16
NOTES	31
INTERVIEWS	32
SOURCES	33

LIST OF EXHIBITS

EXHIBIT 1	
RURAL SOCIAL INSURANCE PROGRAM CURRENT POPULATION COVERAGE, HEALTH CENTERS AND PERSONNEL	18
EXHIBIT 2	
RURAL SOCIAL INSURANCE PROGRAM TIME ALLOCATION OF MEDICAL DOCTORS, 1993	19
EXHIBIT 3	
RURAL SOCIAL INSURANCE PROGRAM SOURCES OF REVENUE, 1990-93	20
EXHIBIT 4	
RURAL SOCIAL INSURANCE PROGRAM ANNUAL REVENUES, EXPENDITURES AND SURPLUSES, 1985-1993	21
EXHIBIT 5	
RURAL SOCIAL INSURANCE PROGRAM BUDGETS AND EXPENDITURES, 1989-93	22
EXHIBIT 6	
INFLATION IN ECUADOR, 1989-93	22
EXHIBIT 7	
RURAL SOCIAL INSURANCE PROGRAM BUDGETS AND EXPENDITURES, 1989-93	23
EXHIBIT 8	
GDP GROWTH IN ECUADOR, 1989-93	23
EXHIBIT 9	
RURAL SOCIAL INSURANCE PROGRAM BUDGET BY LINE ITEM, 1989	24
EXHIBIT 10	
RURAL SOCIAL INSURANCE PROGRAM BUDGET BY LINE ITEM, 1990	25
EXHIBIT 11	
RURAL SOCIAL INSURANCE PROGRAM BUDGET BY LINE ITEM, 1991	26
EXHIBIT 12	
RURAL SOCIAL INSURANCE PROGRAM BUDGET BY LINE ITEM, 1992	27
EXHIBIT 13	
RURAL SOCIAL INSURANCE PROGRAM BUDGET BY LINE ITEM, 1993	28
EXHIBIT 14	
RURAL SOCIAL INSURANCE PROGRAM BUDGET COMPOSITION, 1989-1993	29
EXHIBIT 15	
RURAL SOCIAL INSURANCE PROGRAM BUDGET AND EXPENDITURES BY ADMINISTRATIVE LEVEL AND PROGRAM, 1993	30

ACRONYMS

GDP	Gross Domestic Product
IESS	Ecuadorian Institute of Social Security
SSC	Rural Social Insurance Program
S	Sucres (Ecuadorian currency)
U.S.	United States of America

ACKNOWLEDGMENTS

This exploratory study was carried out through the AID-financed Health Financing and Sustainability (HSF) Project, at the request of USAID/Ecuador, and in close cooperation with the National Director and senior staff of SSC, Ecuador's Rural Social Insurance Program. The study was meant to supplement an economic analysis of IESS, the Ecuadorian Social Security Institute, which is the parent organization of SSC. The author of that analysis, Carmelo Mesa-Lago, also reviewed a first draft of the present study and his suggestions have been used in the preparation of the final draft.

Research for the study's observations on SSC organization and management was carried out by interviewing senior SSC staff at the central and regional levels (see Interviews). Research and analysis on SSC financing was carried out in close association with the director of SSC's Economic Division, Nilo Macias and his assistant Giovanni Apolo. Preparation of financial data tables and production of the study at the State University of New York in Stony Brook, NY owes a great debt of gratitude to Eileen Zappia. A Spanish translation of the study, coordinated by Jazmina Estupinan, is also available.

The authors express deep appreciation for their support and guidance to SSC's National Director, Crnl. Fausto Flores, and to SSC's Medical Director, Dr. Rodrigo Vinan; to Dr. Pedro Barreiro, Lic. Antonio Montalvo, Lic. Luis Tuicanaza, Dr. Rodrigo Contero Peñafiel, Lic. Nilo Macias, and Lic. Maria Caizapanta Vega who provided comments on a draft of this report; and to the staff of Abt Associates, Inc. who provided management services for the study. Responsibility for the analysis and recommendations remains with the authors.

EXECUTIVE SUMMARY

This study focuses on the organization and financing of SSC, the Rural Social Insurance Program of the Ecuadorian Institute of Social Security (IESS). SSC, which was created as a pilot program in 1968, provides basic health services for all members of 153,000 rural households, and small pensions for heads of these households. SSC services account for 40 percent of total IESS population coverage but absorb only 4 percent of IESS expenditures.

SSC is funded by IESS and Government subsidies, which together account for 80 percent of the program's total expenditures; the balance is funded by income from SSC investments and by monthly contributions from participating rural households. Health services are provided by doctors, dentists, and auxiliary nurses; about 5 percent of patients are referred to IESS hospitals where they represent about 13 percent of all admissions. SSC, with community participation, has constructed 549 health centers, but about 15 percent of these are inoperative because of vacancies in doctor and auxiliary nurse positions.

SSC's services are limited by its staff level and budget; the staff/population ratio is a low 1.6/1,000 and expenditures/capita (in 1993) were only about 18,000 S (U.S. \$9.50). After a period of rapid expansion in both membership and the number of health centers, SSC is beset by shortages in medical staff and other inputs, particularly medicines. Actual expenditures are significantly less than approved budgets. For its budgets, personnel appointments and procurement of medicines, SSC depends on its parent organization (IESS), a relationship that has become a primary cause of its difficulties. However, internally, SSC management procedures have also become increasingly inefficient. Despite its relatively simple organizational structure, SSC is seriously hampered by its backwardness in communications and information technology, and by its failure to effectively use the limited autonomy it does have.

The most fundamental issue in SSC's viability is its dependency on IESS, particularly in personnel appointments, in the procurement of basic medicines, and in its financing. If reforms of IESS were to reduce the urban wage base from which SSC derives about half of its income, and if the Government were to eliminate its SSC subsidies, then other sources of financing would have to be found if SSC is to continue providing basic health services. Self-financing from household payments is not a viable option, given the low incomes of the covered population, although some increase in monthly contributions seems feasible.

1.0 INTRODUCTION

In the current debate about the future of the Ecuadorian Social Security Institute—*Instituto Ecuatoriano de Seguridad Social* (IESS)—the fate of its Rural Social Insurance Program—*Seguro Social Campesino* (SSC)—has not received much attention. This study focuses on the organization and financing of SSC, an institution that has since its inception 26 years ago actively pursued social insurance goals, such as solidarity and subsidization, as well as an objective of international financing agencies, namely to impose co-payments for health services on beneficiaries.

A recent economic analysis shows IESS to be dysfunctional, overstuffed, and deeply in deficit (Mesa-Lago, 1993). Recent actuarial reviews of the Institute's medical care program for urban workers (Bayo, 1993), and of urban workers' pension benefits (Lalama, 1993), project wage-based rate increases of such magnitudes as to make fundamental changes in organizational and financial arrangements inevitable.¹ In contrast, SSC is functional; its health services are understaffed, but it would be a financially viable program under the current social insurance law if its annual budgets were fully funded and approved on time. Pending an actuarial review of SSC, scheduled for this year, one can anticipate that the program's further expansion would require some adjustments in its current revenue structure. Reductions in the IESS wage base, however, and in government subsidies—the two main sources of SSC funding—would seriously threaten the program's financial viability.

In 1993, SSC provided basic health services, including hospital referrals, to all members of 152,744 rural households (about 812,000 individuals); in contrast, the IESS medical care program provides comprehensive medical care for covered workers, but only maternal and infant care for their dependents. SSC also provides pension benefits for heads of rural households, but at much lower levels than IESS pays to retired urban workers. SSC accounts for 40 percent of total IESS population coverage but absorbs only 4 percent of total IESS expenditures.

In comparison with the comprehensive IESS medical care program for urban workers, SSC delivers low-cost basic health services for rural families. It provides 7.5 percent of Ecuador's total population with basic health services and pensions at a cost equivalent to 0.1 percent of GDP. All other IESS programs, which together cover 10 percent of the population (with higher, but less equitable levels of benefits), account for over 2 percent of GDP. In absolute terms, the SSC budget in 1993 was about 26 million sucres (US \$14 million). Actual expenditures, however, were only about two-thirds of the approved budget. Actual expenditure on medical care for the covered population (i.e., excluding pensions) was about 14.6 billion sucres (US \$7.7 million), or 18,000 sucres (US \$9.50) per capita.

SSC began in 1968 as a pilot program, with four health centers (*dispensarios*) and 611 affiliated households, sponsored by the National Welfare Institute (*Instituto Nacional de Prevision*, a predecessor of IESS), with technical assistance provided by the Iberoamerican Social Security Organization (*Organizacion Iberoamericana de Seguridad Social*). After five years of experimentation, the Ecuadorian government in 1973 accepted the program, including its household coverage and community participation features. In 1980, there were 101 health centers, covering 20,782 households, (Barreiro, 1993) and by 1990 the program had expanded to 519 health centers and 131,414 households. In the last three years

(1990-93), another 40 health centers were added (a 5 percent increase), while household coverage increased by 16 percent (*Exhibit 1*).

The emergence and rapid growth of SSC was facilitated by the country's economic, social, and political development. During the program's first decade (1968-1980), Ecuador experienced rapid economic growth, fueled by an oil boom, while the country's population was still predominantly rural. Economic conditions facilitated social progress while political leadership encouraged grassroots participation. The situation changed during the eighties when economic growth slowed but rapid urbanization continued. Yet, rural output and income increased more rapidly than in the urban sector during this period, which may have helped in maintaining momentum for SSC's rapid expansion.

The premise of this study, then, is two-fold: First, in current efforts to reform IESS, SSC should be treated separately and with reference to its own particular antecedents and current problems. Some of these problems stem from its rapid growth and the intrinsic difficulty of serving a low-income, widely dispersed rural population; others are inherent in its uneasy dependency relationship to IESS. Second, whatever its current problems, SSC deserves recognition and support for having pioneered—and for continuing to operate—a program of relatively low-cost health services, with strong community participation and regular co-payments by rural households.

2.0 ORGANIZATION

SSC is a program intended primarily for small-scale farmers and their families who are members of—and pay their monthly contributions through—community organizations. Moreover, the program is targeted toward farm households residing outside the seats of government (*cabeceras*) of communities (*parroquias*) or districts (*cantones*). If one uses this population segment as the denominator (and assumes that it represents about one-third of the rural population), then SSC covers about 50 percent of its target population, rather than 17.5 percent of the total rural population of 4.6 million, which is the coverage cited by Mesa Lago (1993) and other sources.

The law that spells out current entitlements of—and financial responsibilities for—SSC coverage was passed in 1981 (IESS, 1992). Benefits include medical and dental care, as well as a burial allowance, for all members of peasant households, and a pension for complete invalidity—or for retirement at age 70—of the head of household. The law codified monthly household contributions at 1.0 percent of the national minimum wage; IESS contributions at 0.7 percent of its wage base, paid equally by employers and employees; and a government contribution equivalent to 0.3 percent of the IESS wage base. These sources of revenue were in addition to previously existing government subsidies, which are implied but not specified in this law.

The 1981 law also stipulated that procurements of goods and services for SSC should be made by IESS on a priority basis and independently from purchases for other IESS programs. This approach reportedly worked well, particularly for medicines, but it was modified in 1990 by a government decree that centralized all purchases of pharmaceuticals (medicines, medical supplies, and surgical equipment) within IESS. Because of this measure, however, which presumably was intended to enhance efficiency, SSC health centers are now severely undersupplied with medicines. The demands of IESS hospitals, and the small proportion of SSC within total IESS pharmaceutical purchases, appear to have caused neglect of SSC requirements.

Employment of SSC personnel is subject to Ecuador's national labor code, which assigns authority to fill permanent positions solely to the heads of governmental institutions, in this case the general director of IESS. Only temporary appointments, which are limited to six months and non-renewable, can be delegated to a lower level, such as the national director of SSC. The labor code also gives public sector unions strong rights; SSC medical doctors and dentists, auxiliary nurses, and social workers are unionized. Moreover, the selection of medical doctors and dentists for permanent government positions, including those in SSC, in accordance with the medical and dental federation law, is in the hands of the Provincial Medical and Dental Colleges. Only social workers and auxiliary nurses are recommended directly by SSC for appointment by the general director of IESS.

Current data (July 1994) indicate that SSC has 42 vacancies for medical doctors (12 percent of 330 positions), 9 vacancies for dentists (9 percent of 102 positions), and 117 vacancies for auxiliary nurses (20 percent of 588 positions).² Of its 546 health centers, probably about 15 percent are currently inoperative because of staff shortages. In addition, 1993 data indicate that medical doctors do not allocate all of their paid time to their contractual obligations (*Exhibit 2*).

Based on their activity reports, doctors—who are contracted for either four or six hours daily, five days a week—only work 78 percent of their contracted time on SSC tasks; the unaccounted-for balance of 22 percent probably includes union activities (which their union agreement permits), logistical problems in reaching health centers, and reportedly some negligence in fulfilling their obligations. Of the time actually spent on the job, doctors use about half in providing curative care, one-third on preventive care and the balance on administration and training. Training in this case typically means one-month assignments (*pasantias*) at IESS hospitals to develop specialized skills. Most doctors and all dentists employed by SSC work at more than one health center, depending on the number of households inscribed at each health center.

Health centers are constructed to provide living quarters for auxiliary nurses, and the original pilot program model expected them to live there permanently. Under their union contract, however, auxiliary nurses work eight-hour days, five days a week, and many no longer live at a health center. Instead, they commute and—like doctors and dentists—may count union activities as part of their contractual commitment to the job. Moreover, female employees are entitled to seven months maternity leave which accounts for some absences of auxiliary nurses from health centers.

With the passage of the SSC law in 1981, four regional offices were established to coordinate program implementation at the community level. With the rapid increase in the number of health centers, regional offices were increased to eight in 1985; this number has now been increased to nine, to coincide with the number of IESS regional offices. This latest change is part of an IESS-wide reorganization to streamline its administrative structure (IESS 1994). At the regional level, SSC has 165 positions; 30 of these are medical doctors, dentists, and nurses who work as supervisors of health center staff; 48 are social workers who promote community participation, and 85 are administrative, clerical and menial staff, most of whose record-keeping and other support services are done by hand. There is virtually no computerization at this level.

The current reorganization of IESS includes only minor adjustments in the relatively simple organization of SSC at its central office in Quito. SSC headquarters, under a national director, consists of several administrative areas, including personnel, budget, community participation (*promocion social*), medical programs and pensions, as well as statistical and logistical support services. Their organization structure is in flux, caught between gradual and informal internal changes and further adjustments expected as part of recently promulgated staff reductions of IESS, which SSC is expected to share, at least at the central and regional levels of administration. Of 136 central office positions, about 40 are professional staff and all others are clerical and menial workers. With only partial computerization at the central level, most personnel, pension program, and other expenditure transactions are still recorded by hand.

Administrative procedures within SSC have become more recalcitrant because, after a four-year period of continuity (1988-92), the directorship of SSC has changed five times since September 1992 (as has the directorship of IESS). Four of these appointments, made by the governing council of IESS, have been outsiders without prior SSC or IESS experience. Each turn-over has slowed decision-making because most resource allocation decisions within SSC require the director's signature.

More mundane, but no less convincing causes of administrative inefficiency, for example, are that the entire SSC headquarters building has a single outside telephone line; a separate SSC warehouse for

medicines, supplies, equipment, and furniture also has only one outside line that feeds into an overloaded trunkline, which on many days can handle only incoming but no outgoing calls. Record keeping at SSC headquarters is only partly computerized; all statistical data originating at health centers and regional offices are compiled by hand and sent to the central office by surface mail. Quantities of accounting documentation on minor expenditures allowed at the regional and local levels reportedly are missing. Processing of relatively more important matters, such as staff payrolls and beneficiary pensions, appears to be more efficient, although long delays of initial payments for temporary appointees and newly pensioned beneficiaries are typical.

In comparison with its parent organization, SSC is not overstaffed. Whereas the IESS total staff/coverage ratio is over 13:1000, the SSC ratio is only 1.6:1000. However, while SSC vacancies among medical staff at the health center level total 168, there are only 7 administrative vacancies at the regional and central level, combined. Thus, inefficiency in service delivery at the community level is in large part due to shortages of medical staff and medicines, while at the regional and central levels, inefficiency is more likely the result of hardware and staff shortages in record keeping and inconsistent decision-making.

The two most debilitating inefficiencies, however, are personnel appointment and medical procurement procedures. Permanent appointments (*nombramientos*) of medical doctors and dentists, from the moment a vacancy occurs, take up to a year to select and approve candidates. Temporary short-term appointments, which the national director of SSC can approve, are a necessary stop-gap measure, but the provincial medical and dental colleges (*colegios*) do not allow a temporary appointee to be nominated for permanent employment in the same position. In general, SSC executives regard the influence of the provincial medical and dental professional associations (*colegios*) and of unions as seriously restricting their control over employment and supervision of medical doctors, dentists, auxiliary nurses, and social workers.

Procurement of medicines, medical supplies, and surgical equipment involves a bidding process that is now centralized within IESS for all its medical care programs. Of the 71 items on the SSC list of basic medicines, which each health center is supposed to have on hand, only 33 were in stock at the central warehouse at the time of this study. In response to all orders placed for 1993, the SSC warehouse received a single delivery, on December 28, 1993. Among the large quantities of supplies ordered for all IESS medical programs, most of which serve adults in urban hospitals, the very different requirements of SSC health services are easily neglected.

Within SSC, processes for ordering and distributing pharmaceuticals are also inefficient. Health center staff are expected to project their requirements for nine months and they supposedly receive deliveries every six months. At the central level, however, the projection of total requirements is not based on the sum of these individual projections because many health centers do not submit them. Instead, a simple aggregate projection model is used, based on central medical staff judgment of what health centers will need each year. The health centers' projections are used instead by the warehouse staff as a guide in preparing packets for their semi-annual deliveries. Inconsistencies between what health centers order and what headquarters assumes they need may thus also in part account for shortages.

The technology of SSC storage and distribution of medicines is seriously inadequate. There is no cold chain; the warehouse has almost no refrigeration capacity and most health centers have no

refrigeration equipment. Thus, a number of basic medicines and vaccines cannot be used. The warehouse, in fact, is an inappropriate building for storing most medicines and it has no security arrangements. Its staff are largely untrained and they are not provided with special clothing, masks and gloves required for handling sensitive or dangerous materials. Transportation equipment is insufficient for the arduous task of distributing materials to over 500 health centers, considering their widely dispersed and remote locations. Many health centers receive their semi-annual deliveries late or not at all.

Central and regional staff, who promote and supervise SSC activities at the community level, face many obstacles in carrying out these tasks. Transportation is a problem, in part because the use of cars and trucks has also been centralized by IESS into motor pools, at both the central and regional levels. Use of motor vehicles, even if they have been purchased with SSC funds, is a frequent point of contention between SSC and IESS managers. Another obstacle is the limited availability and tedious processing of travel funds.

Supervisory tasks in SSC are divided between promoting community participation (usually by social workers) and monitoring health center staff (usually by doctors and nurses). Their divergent perspectives, on what communities need and what health centers should provide, are an undercurrent of internal SSC program and policy discussions. Community organizations must donate land for—and agree to help maintain—health centers. The requisite community analysis, performed by SSC social workers, both verifies this commitment and identifies local health conditions for whose improvement preventive health care may be more appropriate than curative services. Once a health center is in operation, however, payment by households of their monthly contributions may reflect a demand more for curative care than an understanding of their need for preventive care; in other words, what communities need is not necessarily what they want. Moreover, willingness to pay (and perhaps to pay a higher monthly contribution) probably is strongly affected by the presence of medical staff and the availability of medicines at health centers. Medical staff are likely to respond to this expressed demand for curative care more readily than to SSC policy, which seeks to promote preventive care, a tendency that may be conditioned also by their training.

3.0 FINANCING

The sources of financing for SSC, the program's annually approved budgets, and its actual expenditures have not in recent memory been subjected to a separate analysis. Thus, the data tables and observations offered here are a first attempt to provide an overview of SSC financing for 1989-93. This is the five-year period since passage of the Law of Obligatory Social Insurance in 1988—an update of the 1981 law—which at the time of research for this study (June - August 1994) was the legal framework for all IESS—including SSC—programs. The 1988 law more completely specifies all sources of SSC funding (Annex 1), which are more varied than mentioned in the 1981 law, referred to above.

The IESS wage base is the major source of SSC revenues (54.3 percent). Other sources include government subsidies (26.6 percent), income from SSC investments and other sources (14.8 percent), and monthly household contributions (4.3 percent). While the composition of these sources shows some annual variation, it has not changed significantly since 1990 (*Exhibit 3*). There is some doubt, however, based on Mesa-Lago's findings (1993), whether the legally mandated government subsidies have been fully available to SSC.

IESS has been severely criticized for failing to separate its funds among programs; thus, one must ask how much of the legally mandated 1 percent share of the IESS wage base (which includes a 0.3 percent government subsidy) has actually been allocated to SSC. The answer for 1991 was 92 percent,³ but this does not necessarily mean that all of these funds were actually made available for SSC expenditures. Historically, the data suggest that the SSC has run large budget surpluses, as reflected in the low expenditure to budget ratios over the last 10 years (*Exhibit 4*); these apparent surpluses may in part reflect shortfalls in the availability of legally mandated funds.

One might also ask if annual revenues, legally earmarked for SSC, equal annual budgets approved for SSC. The answer appears to be 'yes'; a comparison of expected revenue (*Exhibit 4*) with the approved budgets (*Exhibit 5*) for the years 1989-1993 reveals only minor differences. The low expenditure to budget ratios, however, may be due in part to withholding (or unavailability) of funds legally earmarked for SSC. In particular, the category called "investments" in the approved budgets for SSC needs closer examination (see below).

Large nominal variations, over the last five years, in approved budgets as well as actual expenditures (*Exhibit 5*) are not particularly meaningful, of course, unless they are adjusted for inflation.⁴ After this adjustment has been made (*Exhibit 7*) one realizes that SSC funding is quite volatile, and that it appears to have lagged behind growth of GDP. Ecuador's economy, after a decade of stagnation, recorded an increase in GDP between 1989 and 1993 of 14 percent (*Exhibit 8*), whereas SSC expenditures—while fluctuating above and below their 1989 level—were no higher in 1993 than in 1989 (*Exhibit 7*).

The inflation adjustment also highlights aberrations, e.g. the abnormally high level of the approved budget in 1989, which makes this a misleading base year. Looking only at the last four years, 1990-93, it is clear that annual budgets have not increased and that expenditures have declined, in real

terms, over this period. One should also note that the volatility of the expenditure index is greater than that of the budget index (*Exhibit 7*).

A comparison of annual SSC expenditure ratios (i.e., expenditures/approved budget) by budget category (*Exhibits 9-13*), and of the composition of annual budget allocations (*Exhibit 14*), shows significant variations that suggest administrative problems arising from SSC's dependency on IESS and the Government labor code. Compared to the overall annual expenditure ratios, the remuneration category has fared much better and pharmaceuticals much worse. Yet, *Exhibit 14* shows that both categories have increased in their respective approved budget allocations. Remunerations jumped to 51 percent in 1993, from 26 percent during prior years, and the proportion for materials and supplies (close to half of which is medicines) also doubled, comparing 1991-93 with 1989-90. The increase in remunerations in 1993 is explained largely by a sharp rise in benefits and allowances for medical staff in all Government positions that year. The good intention of the increased material and supplies allocation, however, was frustrated by the lowest-ever expenditure ratio for this category in 1993.

The most puzzling of the SSC budget categories is investments. It refers to an allocation of funds that, instead of being made available for expenditures on goods and services, appears instead to be "forced savings." These "investments" (or savings) are not intended to fund current or future pensions of SSC beneficiaries since these are budgeted separately as transfer payments. The excessively high proportion of the 1989 budget allocation to investments (which may have contained accumulated surpluses from previous years, shown in *Exhibit 4*) explains the bloated total budget that year. Since then, the investment proportion has declined; it virtually disappeared in 1993, perhaps because these funds were used to offset the mandated increase in remunerations. Having to speculate about the investment category, however, means that better information is needed in order to understand its functions as both an expenditure and a source of income.

While *Exhibits 3-14*, as an overview of SSC revenues, budgets, and expenditures, (including adjustments for inflation and comparisons to GDP growth) provide some insights into—and raise some questions about—the institution's financial health, *Exhibit 15* provides a more complete accounting of 1993 expenditures, as well as more useful detail.⁵ Comparisons of budgeted and expended amounts and percentages, and of expenditure ratios, by administrative level and budget category, highlight bottlenecks. The worst of these is the procurement of medicines and supplies. Observations on this subject, in the preceding section, are clearly supported here. Medicines and supplies accounted for 14 percent in the budget, but for only 2 percent of expenditures (and for an expenditure ratio of 11 percent).

The central and regional levels of administration, which together have a relatively lean 21 percent allocated in the budget, nevertheless account for 26 percent of total expenditures. Health centers, where SSC program performance is best evaluated, represent an admirable 70 percent of the budget, but only 62 percent of expenditures. Most of the explanation for the low expenditure ratio for health centers (58 percent) is the medicine and supplies problem. The expenditure ratio for wages and benefits—91 percent in the health centers—was considerably higher than at the administrative levels.⁶ The line item "Referrals to IESS hospitals," which represents 10 percent of the budget, shows no expenditures. In this case, while about 5 percent of all health center patients are referred to IESS hospitals (where SSC patients represent about 13 percent of all inpatients), this expense simply has not shown up as a budgetary transaction.

The "real" picture, which best reflects actual program performance in 1993, is the comparison of line items in the summary of *Exhibit 15*. The overall expenditure ratio of 89 percent for wages and benefits reflects the fact that about 13 percent of all positions in SSC are vacant. The severe shortage of medicines and supplies is the major bottleneck that directly affects program performance at all health centers; the non-expenditure of budgeted funds for referrals to IESS hospitals probably does not affect performance; and pension payments appear to be on schedule.

A budget review as a diagnostic device thus provides some answers while it also begs some questions. How is SSC dependency on IESS, particularly in the areas of personnel appointments and procurement of medicines and supplies, reflected in the budget? The 34 percent of the 1993 budget that remained unexpended may reflect underpayments of IESS and government subsidies to SSC, but it may also result from administrative inefficiency in relations between IESS and SSC, and within SSC itself.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The above findings on SSC organization and financing are based on primary data provided by SSC; their interpretation, however, has been influenced by a series of interviews with SSC executives, which also support the following conclusions concerning the institutions' principal problems. An earlier version of this summary was reviewed and generally agreed-upon by those interviewed; recommendations (bold-faced) on how these problems might be addressed are offered as a basis for further discussions.

4.1 SSC PROGRAM ORIENTATION

Data on doctors' time allocation support the concern, heard both internally and externally, that SSC health services delivery concentrates on curative care. The objective of SSC, however, which is clearly specified in medical staff job descriptions, is to provide primary health care as it is internationally defined. SSC executives assert that medical staff have a curative orientation and neglect assigned tasks in prevention. Medical staff, however, contend that community demand determines the large proportion of their time allocated to curative care, and that preventive care is limited by community apathy, limited supplies, and logistical problems.

Expanding preventive activities requires a dialogue to improve rapport between SSC central and regional program supervisors, on one side, and health center staff (including their union representatives) and community leaders on the other side of this argument. Priority program objectives need to be more clearly specified by supervisors and supported with necessary supplies and logistical assistance. Focused campaigns may be more effective than routine approaches in expanding vaccination coverage, disease screening, and household planning. Environmental health improvements may require more active participation by households through their community organizations, but they also require appropriate support from higher levels, including cooperation with other government programs.

4.2 MEDICAL STAFF RECRUITMENT

Recruitment to fill doctor and dentist vacancies is largely out of their hands, argue SSC executives, and unions make all medical staff employment and supervision very difficult. Little is said about employment and supervision of dentists, apparently leaving them to determine their own work routine. Auxiliary nurses, most of whom are recruited as candidates for nine-month training programs sponsored by SSC, owe 18 months of service at a health center after graduation. SSC is short of candidates for training and sees many graduates, after they complete their required service, leave SSC employment for urban positions, often in IESS hospitals.

Ecuador's medical school graduates are required to perform a year of service at the primary care level (usually at Ministry of Health facilities). Thus, there should be a sizeable pool of candidates with some prior experience in low-income urban and rural settings. SSC could stimulate applications for its vacancies from this pool with advertising that features its pay and benefit provisions (which include a rural supplement). Closer and more continuous consultation with entities involved in the selection process, particularly the provincial medical and dental colleges (colegios), might improve its efficiency, as might improved personnel processing and payment procedures within IESS. Better supplied health centers, and more training and logistical support for preventive care, should enhance the attraction of working in rural communities, for both doctors and auxiliary nurses. The work routine of dentists and their logistical requirements in the rural areas may also need review.

4.3 COMMUNITY SUPPORT

Social workers are the front line in SSC contacts with community organizations. They analyze community needs and resources, seek commitments from community organizations to donate land and to help construct and maintain health centers, and they promote outreach activities by medical staff. Their work is essential for making the mystique of community support of SSC health centers into a reality. This mystique, social workers claim, is being undermined by the curative care orientation of medical doctors, shortages of medicines and supplies at health centers, disgruntled community leaders, and by many households that fail to keep up their monthly monetary contributions to SSC.

Social workers' responsibilities, and their effectiveness in carrying them out, should be reviewed. They inevitably work in the shadow of medical doctors who may need to give social workers greater support at the community level. Social workers, in turn, may be over-extended—both personally and professionally—in their frontline positions. Their role as stimulators of community participation must not be allowed to become mere enforcement of such participation. Additional senior staff involvement may be required to negotiate community agreements and to maintain and increase household membership in the program.

4.4 ADMINISTRATIVE LEADERSHIP

Central leadership of SSC undoubtedly has suffered from the frequent turn-over of directors, but senior staff are also limited in number and several key positions are either vacant or filled by professionals with training and experience that is unrelated to their present responsibilities. The current reorganization of IESS may affect SSC only marginally, but IESS-wide reductions of staff probably will include administrative staff cuts at SSC. Many technical and clerical staff at both administrative levels are deficient in educational attainment and job skills. Communication and information technology at SSC remains rudimentary. Taken together, these problems have increased as SSC has continued to expand without attention to its administrative absorptive capacity.

Administrative leadership within SSC requires continuity, appropriate professional qualifications, and (preferably) prior work experience within IESS. Elevating regional coordinator positions to the level

of department heads, being implemented in the IESS reorganization, should make these positions more attractive for appropriately qualified professionals. Appointment to central office department head and division chief positions should require prior experience at the regional level; alternatively, central office department head and regional coordinator appointments might be exchanged periodically. Technical and clerical staff need to develop skills, particularly in information processing; and SSC communications and information systems need major improvements.

4.5 IESS FINANCIAL MANAGEMENT

SSC leaders have not been using budget analysis as a management tool. They are not well informed about revenue and expenditure flows, perhaps because they believe these are beyond their control. Indeed, decision-making authority for personnel appointments; procurement of medicines, supplies, and surgical equipment; and even relatively minor resource usage (e.g., motor vehicles and travel) is concentrated within IESS rather than being delegated to SSC. Even a cursory review of the SSC budget raises important questions, such as why it is less than revenues legally earmarked for SSC, why expenditure to budget ratios are so low, what happens to so-called 'investments' in the SSC budget, and why pensions are not separated from medical care accounting.

A principle of social insurance administration is the separation of funds for different programs. It seems unlikely that IESS has observed this principle for SSC any more than for its other programs. The current reform of IESS seeks to overcome this flaw, even as the more fundamental issue of public/private responsibilities for social insurance is being debated. SSC should exercise greater control over its own budget, at least as specified in the 1981 law, and its funds should be administered separately from those of other programs. All legally mandated revenues, including income from investments of some of these funds, should be allocated to SSC. If SSC is expected to reimburse IESS for management services (as it is for hospital services), this should be included in its budget as a separate line item, rather than being implicitly withheld by IESS. Centralized purchasing of pharmaceutical supplies and equipment should not be interpreted as a negation of IESS responsibility under the 1981 law to give SSC requirements priority; a return to direct procurement by SSC of basic medicines should be considered by IESS. Medical staff appointments for SSC might be handled similarly by the general director of IESS, giving them high priority with special consideration for the program's unique requirements, and by delegating authority to the SSC director to the maximum extent allowed under the labor code.

4.6 SSC FINANCIAL MANAGEMENT

Internal financial management by SSC is also a problem, and would have to be strengthened before it could assume greater responsibility for its overall budget. It is not clear to what extent low expenditure to budget ratios, particularly at the level of individual budget categories and line items (where they vary greatly), result from failures by IESS to transmit funds within approved budget parameters, and from expenditure accounting problems (partly at IESS, e.g. for pharmaceuticals, and partly at SSC, e.g. for supplies and equipment which it has authority to purchase directly). The largest budget category (remunerations) has the highest expenditure to budget ratio, pharmaceuticals the lowest; both are IESS responsibilities. Categories over which SSC has more direct control, while they represent small proportions of the total budget, tend to have lower than average expenditure to budget ratios.

Internal procedures for direct purchases of goods and services, other than pharmaceuticals, for which SSC has legal authority up to specified cost ceilings, could be more efficient. SSC should not exceed legal time limits for paying suppliers, because it reduces its credit rating and causes anticipatory price escalation. Closer cooperation with the IESS control office (*Intervencion*), located in the SSC building, would help SSC staff avoid unnecessary steps and speed up solicitations and payments. Improvements are needed in accounting, including better coordination among SSC departments in tracking expenditures. SSC should also assert its control over usage of its own motor vehicles and management of its travel funds, and it should develop an action plan for improving its communications and information technology. Some of the needed equipment can be purchased with funds allocated in the budget and within the limits of SSC direct purchasing authority.

4.7 LEVEL AND COMPOSITION OF FINANCING

Finally, the question of the level and composition of SSC financing needs to be addressed. The legally mandated sources of revenue for SSC may still suffice to sustain services at the present level of coverage. However, the shortfalls of expenditures in several budget categories are of great concern. If all of the unexpended budget in 1993 were due to a revenue shortage within IESS, the total funding shortfall would be about 8.5 billion sucres (US\$ 4.5 million); however, revenue shortages probably account for less than half that amount; because to a considerable extent the low expenditure to budget ratio (66 percent in 1993) is attributable also to administrative inefficiency within both IESS and SSC. The SSC subsidy from the IESS wage base (0.70 percent) probably is comingled with other IESS revenues instead of being separately administered exclusively for SSC, as called for by law. State subsidies of SSC, also provided for by law, are minor amounts among the Government's total transfer payments annually.

An argument can be made that SSC beneficiaries should contribute a larger proportion of the cost of their health services and pensions. Doubling monthly household contributions would be a reasonable recommendation, depending on its rationale. This increase probably would not be a hardship for most participants (see Annex 2). Revenue from the legally mandated household contribution at its current level may be largely used up by the cost of its collection. This may be a reason for increasing the levy, but not a convincing rationale for requiring low-income households to cover a larger part of the cost of their medical care. A more important role of household payments is to stimulate community participation in developing basic health services, and to give participants some leverage in insisting that these services be available in adequate quantities and of acceptable quality. However, the principal sources of SSC financial support, given the low incomes of rural households, will surely have to remain various forms of national-level subsidies.

ANNEXES

ANNEX 1: LAW OF OBLIGATORY SOCIAL INSURANCE

(Articles and paragraphs referring to the Rural Social Insurance Program)

Article 114 Administration of funds

Funds of the Rural Social Insurance Program are administered by the National Commission for Rural Social Insurance, which also provides appropriate accounting for this purpose.

Article 165 Sources of funds

10. A State contribution equivalent to 40 percent of pensions paid out by the Institute [IESS];
14. One percent of the national minimum salary which is to be paid as a monthly contribution by the heads of households who are members of the Rural Social Insurance Program;
15. One percent of [wage-based] contributions to the Institute, distributed as follows: 0.3 percent to be paid by the State; 0.35 percent by wage earners who are social insurance contributors; and 0.35 percent by [their] employers;
16. Funds from the Marginal Social Insurance Fund referred to in Article 144;
23. A contribution by the State dedicated to the defense of the peasantry in the amount of 600,000 sucres annually;
29. Profit distribution from [Rural Social Insurance Program] investments;
30. Special membership contributions not foreseen in this paragraph;
34. A State contribution, which is to be credited to the Rural Social Insurance Program by the Central Bank of Ecuador, of no less than 15 million sucres annually, in conformance with Decree 307, published in R.O. 279 of April 4, 1973; and,
35. Resources which through other legal or contractual dispositions, or as donations, estates, bequests, and subsidies are given to the Institute.

Article 144 Marginal Social Insurance Fund

For the marginal population, which has incomes below the minimum national wage, and which is not covered by other forms of insurance.

[Sources of revenue for this Fund include allocations which the governing council of IESS may make from the Institute's investment income; revenues provided through other laws, intended for this population; and revenues from provincial, municipal and international sources.]

Source: *Ecuador, Gobierno de, Ley del Seguro Social Obligatorio, Registro Oficial, No. 21, 8 de Septiembre de 1988.*

ANNEX 2: ESTIMATING HOUSEHOLD INCOME IN RURAL AREAS TO DETERMINE "ABILITY TO PAY" FOR HEALTH SERVICES

In order to determine how much a rural household of 5.3 individuals (the average size of SSC-affiliated households) might be "able" to pay for health services, one would need to have an estimate of its income. While there are no official data on household incomes of SSC beneficiaries, two reference points might be helpful:

1. One is the official national minimum wage, which in 1993, including all legally mandated fringe benefits, would have provided a worker with an income of S 166,750/month (US \$88/month, or \$1,056/year, using an exchange rate of S 1,900 = US \$1). One should note that the average minimum wage for 1993 (S 63,000/month)—on which monthly SSC contributions by households are based—represented only 38 percent of total earned income when all benefits are included. These benefits include four months extra pay, a cost-of-living allowance equal to the basic wage, and a transportation allowance.¹ Annual increases in the minimum wage, excluding these benefits, have in recent years lagged behind the consumer price index, which has substantially reduced household contributions to SSC in real terms.
2. The other reference point is an estimate of rural household income in 1993. In 1991, the GDP/capita of Ecuador was US \$1,000; the rural population represented 43 percent of the total population; and agriculture accounted for 15 percent of GDP.² One might attribute another 15 percent of non-agricultural output to the rural population (e.g., cottage industries, transportation, marketing and other services), for a combined total of 30 percent of GDP. This yields an average output of US \$698/capita in the rural areas and US \$1,228/capita in the urban areas. Assuming a labor share of 70 percent of total output in the rural areas, or \$490/capita, the annual rural household income would average about \$2,600 (i.e. 5.3 x 490). If one then assumes that small-farmer households—i.e. those typically affiliated with SSC—earn half this level of income, i.e. \$1,300/year, this still puts them ahead of the minimum wage income, including benefits. It might not seem unreasonable, therefore, to use the minimum wage, including fringe benefits, as a SSC standard for its beneficiaries' ability to pay; however, only a part of a small-farmer's income is in cash, earned from the sale of surplus production, while a substantial part of output is directly consumed within the household. The national minimum wage excluding benefits, i.e. S 756,000 (US \$400/year) in 1993, can thus be considered an even more reasonable basis for assessing household contributions.

¹ Banco Central del Ecuador, *Informacion Estadística Mensual*, No. 1,706, April 30, 1994; see Table 5.1.2 for minimum wage and benefits, and Table 4.41 for exchange rate.

² World Bank, *World Development Report 1993* (New York: Oxford University Press, 1993), Tables 1,3, and 31.

Based on the above data and estimates, the 1 percent of minimum wage (excluding fringe benefits) currently being collected from households covered by SSC on a monthly basis can be considered "affordable." Household surveys in several Latin American countries have shown that even very poor households spend at least 2 percent of their incomes on health services, including medicines.³ Thus, if SSC were to provide adequate health services, including medicines, its membership population may not only be able but also willing to contribute 2 percent of the minimum national wage (excluding benefits), i.e. twice the level of its current contributions. If, in 1993, the household contribution had been 2 percent, and assuming this would not have reduced the number of participating households, this source would have contributed 8.3 percent, rather than 4.3 percent of total revenue (see *Exhibit 3*).

³ Ricardo A. Bitran and D. Keith McInnes, *The Demand for Health Care in Latin America*, EDI, World Bank, Seminar Paper No. 46, 1993.

EXHIBIT 1
RURAL SOCIAL INSURANCE PROGRAM CURRENT POPULATION COVERAGE, HEALTH CENTERS
AND PERSONNEL

MEMBERSHIP

Number of households	131,414	(1990)
	152,744	(1993)
Increase in household coverage	16%	(1990 to 1993)
Number of individuals	712,366	(1990)
	811,809	(1993)
Pensioners	2,242	(1990)
	2,700	(estim., 1993)
Community organizations involved in promoting membership and collecting household contributions	2,332	(1993)

HEALTH CENTERS

519	(1990)
549	(1993)

PERSONNEL

Medical positions at health centers	330	
Medical doctors	101	
Dentists	588	
Auxiliary nurses		
Administrative positions	301	
Regional level	165	
Central level	136	
Total number of positions	1320	(1993)
<u>POSITIONS/COVERAGE RATIO</u>	1.6:1,000	(1993)

SOURCES: RURAL SOCIAL INSURANCE PROGRAM - primary data provided by HEALTH PROGRAMMING DEPARTMENT (for coverage, and medical positions), and PERSONNEL DEPARTMENT (for administrative positions, which include social workers).

* These are budgeted positions; for vacancies in 1993, see discussion in text. No data are available for vacancies in 1990.

EXHIBIT 2
RURAL SOCIAL INSURANCE PROGRAM TIME ALLOCATION OF MEDICAL DOCTORS, 1993

	<u>Hours</u>	<u>Percent</u>
Personal curative care	138,093	36.0
Personal preventive care	30,313	7.9
Home visits	23,978	6.2
Health education	21,944	5.7
Community health services	<u>24,822</u>	<u>6.5</u>
Subtotal, health services	239,150	62.3
Administration	44,496	11.5
Training	<u>15,202</u>	<u>4.0</u>
Total hours accounted for	298,848	77.8
Hours unaccounted for	<u>85,136</u>	<u>22.2</u>
Total hours contracted for	383,984	100.0

SOURCES: RURAL SOCIAL INSURANCE PROGRAM - primary data provided by Health Programming Department.

EXHIBIT 3
RURAL SOCIAL INSURANCE PROGRAM SOURCES OF REVENUE, 1990 - 93
(in thousands of current sucres)

	1990		1991		1992		1993	
	TOTAL	PCT.	TOTAL	PCT.	TOTAL	PCT.	TOTAL	PCT.
IESS MEMBER CONTRIBUTIONS								
Employees, 0.35% of wage base (Para 15) ¹	2,020,285	26.0	2,802,000	23.9	4,315,536	25.5	7,294,681	27.1
Employers, 0.35% of wage base (Para 15)	2,000,321	25.8	2,774,000	23.5	4,358,644	25.8	7,347,464	27.2
PARTICIPATING HOUSEHOLDS' CONTRIBUTIONS								
1.00% of national min. wage (Para 14)	525,209	6.7	553,000	4.7	638,818	3.8	1,162,075	4.3
NATIONAL GOVERNMENT CONTRIBUTIONS								
40% of pensions pd. by IESS (Para 10)	243,800	3.1	343,000	2.9	432,000	2.6	700,000	2.6
0.30% of IESS wage base (Para 15)	1,777,109	22.8	2,444,000	20.7	3,802,195	22.5	6,471,436	24.0
Defense of peasantry (Para 23)	600	0.0	600	0.0	600	0.0	600	0.0
Annual subsidy (Para 34)	15,000	0.2	15,000	0.1	15,000	0.1	15,000	0.0
INVESTMENT INCOME								
Interest on bonds ²	246,000	3.2	739,000	6.3	2,003,204	11.8	433,000	1.6
Profit distribution (Para 29) ³	953,000	12.2	694,000	5.9	(no entry)	-	733,000	2.8
Returns on investment ⁴	(incl. under bonds)	-	1,417,000	12.0	1,327,000	7.9	2,164,000	8.0
OTHER								
Various ⁵	(no entry)	-	(no entry)	-	(no entry)	-	647,254	2.4
TOTALS	7,781,324	100.0	11,781,600	100.0	16,892,997	100.0	26,968,510	100.0

SOURCE: RURAL SOCIAL INSURANCE PROGRAM - ECONOMIC DIVISION, annual revenue summaries.

NOTES:

¹"Para" refers to paragraphs in the Obligatory Social Insurance Law, Article 165 (See Annex 1 for source and citation of paragraphs).

² For 1990-92, this source is referred to as "intereses valores fiduciarios," while in 1993 it reads "sorteos cedulas hipotecarias."

³ For 1990-92, this source is referred to as "distribucion utilidades," while in 1993 it reads "sorteos bonos de prenda."

⁴ For 1990-92, this source is referred to as "recuperacion de inversiones," while in 1993 it reads "pagares corto plazo."

⁵ No entries for 1990-92; for 1993, two sources listed are "financiamiento fondos de defensa" (S 200,000) and "financiamiento escalafon medico" (S 447,254); amounts listed in the source for the Agrarian Social Insurance Fund are excluded here.

EXHIBIT 4
RURAL SOCIAL INSURANCE PROGRAM ANNUAL REVENUES, EXPENDITURES AND SURPLUSES,
1985 - 1993
(in millions of current sucres)

YEAR	REVENUES (1)	EXPENDITURES (2)	SURPLUS (1-2)	EXPENDITURE RATIO (2/1)
1985	1,500	1,005	495	67%
1986	2,131	917	1,214	43%
1987	2,714	1,424	1,290	52%
1988	3,265	2,159	1,106	66%
1989	8,621	3,340	5,281	39%
1990	7,781	6,602	1,179	85%
1991	11,782	6,778	5,004	58%
1992	16,893	13,637	3,256	81%
1993	26,969	7,602	19,367	28%

SOURCES: RURAL SOCIAL INSURANCE PROGRAM - ECONOMIC DIVISION, revenues and expenditures for 1985-88, from historical series, 1975-1988; for 1989, from budget summary in Exhibit 9, below; for 1990-93 revenues, from Exhibit 3, above; and for 1990-93 expenditures, from Exhibits 9-13, below.

EXHIBIT 5 RURAL SOCIAL INSURANCE PROGRAM BUDGETS AND EXPENDITURES, 1989 - 93 (in thousands of current sucres)			
YEAR	APPROVED BUDGET (1)	RECORDED EXPENDITURES (2)	EXPENDITURE RATIO (2)/(1)
1989	8,620,711	3,339,975	39%
1990	7,831,324	6,601,699	84%
1991	12,355,233	6,778,327	55%
1992	18,808,875	13,636,504	73%
1993*	26,194,246	7,602,497	29%
<p><i>SOURCE:</i> RURAL SOCIAL INSURANCE PROGRAM - ECONOMIC DIVISION, annual budget summaries.</p> <p><i>NOTES:</i> Expenditures are those accounted for by SSC, including ones recorded during the first quarter of the following fiscal year against the previous year's budget, as is standard accounting practice.</p> <p>* Expenditures recorded for 1993, and thus the expenditure ratio, are much higher in a separate, detailed budget document used as the source for Exhibit 15, below. Also note that expenditure ratios shown in this exhibit differ from those shown for 1990-93 in Exhibit 4, above; the reason is that for these years approved budgets differ from reported revenues.</p>			

EXHIBIT 6 INFLATION IN ECUADOR, 1989 - 93 (1989 = 100)		
YEAR	GDP DEFLATOR	CONSUMER PRICE INDEX
1989	100	100
1990	171	150
1991	242	223
1992	374	357
1993*	527	467
<p><i>SOURCE:</i> CENTRAL BANK OF ECUADOR, <i>Informacion Estadistica Mensual</i>, No. 1706, April 30, 1994.</p> <p>* Based on estimated data.</p>		

EXHIBIT 7 RURAL SOCIAL INSURANCE PROGRAM BUDGETS AND EXPENDITURES, 1989 - 93 (in thousands of constant sucres of 1989)				
YEAR	APPROVED BUDGET	RECORDED EXPENDITURES	GROWTH INDICES	
			BUDGET	EXPEND.
1989	8,620,711	3,339,975	100	100
1990	4,579,722	3,860,643	53	116
1991	5,105,468	2,800,962	59	84
1992	5,029,111	3,646,124	58	109
1993*	4,970,445	1,442,599	58	43
		(3,180,489)		(95)
SOURCE: RURAL SOCIAL INSURANCE PROGRAM - ECONOMIC DIVISION NOTES: See Exhibit 6 for GDP deflator index used in calculating constant values. * Note that Exhibit 15, below, shows a much higher level of expenditures for 1993; the expenditure total from Exhibit 15, converted into constant sucres, and the index - both in parentheses - refer to this higher level of expenditures.				

EXHIBIT 8 GDP GROWTH IN ECUADOR, 1989 - 93		
YEAR	ANNUAL RATE OF INCREASE	GROWTH INDEX (1989 = 100)
1989	0.3%	100
1990	3.0%	103
1991	4.9%	108
1992	3.5%	112
1993*	1.7%	114
SOURCE: CENTRAL BANK OF ECUADOR, <u>Informacion Estadistica Mensual</u> , No. 1706, April 30, 1994. * Estimates		

EXHIBIT 9
RURAL SOCIAL INSURANCE PROGRAM BUDGET BY LINE ITEM, 1989
(in thousands of current sucres)

BUDGET CATEGORY	APPROVED BUDGET (1)	EXPENDITURE S (2)	BALANCE (1-2)	EXPENDITURE RATIO (2/1)
PERSONNEL	1,718,830	1,267,364	451,466	74%
Salaries & wages	707,000	564,675	142,325	80%
Benefits	1,011,830	702,689	309,141	69%
SERVICES	464,750	215,962	248,788	46%
Medical	300,000	104,446	195,554	35%
Other	164,750	111,516	53,234	68%
SUPPLIES	639,895	296,087	343,808	46%
Medicines	22,500	5,040	17,460	22%
Other	617,395	291,047	326,348	47%
FURNISHINGS	322,600	95,296	227,304	30%
Medical equipment	159,700	25,358	134,342	16%
Other	162,900	69,938	92,962	43%
CONSTRUCTION & MAINTENANCE	237,000	54,850	182,150	23%
Construction	187,000	46,916	140,084	25%
Maintenance	50,000	7,934	42,066	16%
FINANCIAL INVESTMENTS	4,634,911	853,161	3,781,750	18%
Long-term	700,000	639,473	60,527	91%
Short-term	3,934,911	213,688	3,721,223	5%
TRANSFER PAYMENTS	599,075	555,676	43,399	93%
Pensions	391,000	392,037	(1,037)	100%
Other	208,075	163,639	44,436	79%
OTHER	3,650	1,579	2,071	43%
TOTAL	8,620,711	3,339,975	5,280,736	39%

SOURCE: RURAL SOCIAL INSURANCE PROGRAM - ECONOMIC DIVISION, budget summary.

EXHIBIT 10
RURAL SOCIAL INSURANCE PROGRAM BUDGET BY LINE ITEM, 1990
(in thousands of current sucres)

BUDGET CATEGORY	APPROVED BUDGET (1)	EXPENDITURES (2)	BALANCE (1-2)	EXPENDITURE RATIO (2/1)
PERSONNEL	2,101,744	1,958,863	142,881	93%
Salaries & wages	814,738	766,377	48,361	94%
Benefits	1,287,006	1,192,486	94,520	93%
SERVICES	905,740	913,020	(7,280)	101%
Medical	583,000	589,281	(6,281)	101%
Other	322,740	323,739	(999)	100%
SUPPLIES	717,338	617,576	99,762	86%
Medicines	405,000	302,536	102,464	75%
Other	312,338	315,040	(2,702)	101%
FURNISHINGS	440,800	217,150	223,650	49%
Medical equipment	225,500	121,054	104,446	54%
Other	215,300	96,096	119,204	45%
CONSTRUCTION & MAINTENANCE	810,000	250,350	559,650	31%
Construction	484,000	208,595	275,405	43%
Maintenance	326,000	41,755	284,245	13%
FINANCIAL INVESTMENTS	1,953,902	1,875,841	78,061	96%
Long-term	704,000	692,841	11,159	98%
Short-term	1,249,902	1,183,000	66,902	95%
TRANSFER PAYMENTS	881,800	760,829	120,971	86%
Pensions	609,500	508,944	100,556	84%
Other	272,300	251,885	20,415	93%
OTHER	20,000	8,070	11,930	40%
TOTAL	7,831,324	6,601,699	1,229,625	84%

SOURCE: RURAL SOCIAL INSURANCE PROGRAM - ECONOMIC DIVISION, budget summary.

EXHIBIT 11
RURAL SOCIAL INSURANCE PROGRAM BUDGET BY LINE ITEM, 1991
(in thousands of current sucres)

BUDGET CATEGORY	APPROVED BUDGET (1)	EXPENDITURES (2)	BALANCE (1-2)	EXPENDITURE RATIO (2/1)
PERSONNEL	3,269,530	2,539,237	730,293	78%
Salaries & wages	1,256,105	1,162,863	93,242	93%
Benefits	2,013,425	1,376,374	637,051	68%
SERVICES	1,345,900	1,222,491	123,409	91%
Medical	810,000	812,106	(2,106)	100%
Other	535,900	410,385	125,515	77%
SUPPLIES	2,281,850	1,128,005	1,153,845	49%
Medicines	1,250,000	368,736	881,264	29%
Other	1,031,850	759,269	272,581	74%
FURNISHINGS	750,183	391,193	358,990	52%
Medical equipment	321,900	152,364	169,536	47%
Other	428,283	238,829	189,454	56%
CONSTRUCTION & MAINTENANCE	1,650,000	175,162	1,474,838	11%
Construction	1,350,000	117,835	1,232,165	9%
Maintenance	300,000	57,327	242,673	19%
FINANCIAL INVESTMENTS	1,719,500	60,589	1,658,911	4%
Long-term	589,000		589,000	0%
Short-term	1,130,500	60,589	1,069,911	5%
TRANSFER PAYMENTS	1,315,483	1,234,679	80,804	94%
Pensions	875,000	858,666	16,334	98%
Other	440,483	376,013	64,470	85%
OTHER	22,787	26,971	(4,184)	118%
TOTAL	12,355,233	6,778,327	5,576,906	55%

SOURCE: RURAL SOCIAL INSURANCE PROGRAM - ECONOMIC DIVISION, budget summary.

EXHIBIT 12
RURAL SOCIAL INSURANCE PROGRAM BUDGET BY LINE ITEM, 1992
(in thousands of current sucres)

BUDGET CATEGORY	APPROVED BUDGET (1)	EXPENDITURE S (2)	BALANCE (1-2)	EXPENDITURE RATIO (2/1)
PERSONNEL	4,886,864	4,720,260	166,604	97%
Salaries & wages	1,850,000	1,764,868	85,132	95%
Benefits	3,036,864	2,955,392	81,472	97%
SERVICES	2,063,980	1,982,603	81,377	96%
Medical	1,255,000	1,274,533	(19,533)	102%
Other	808,980	708,070	100,910	88%
SUPPLIES	3,938,000	2,725,574	1,212,426	69%
Medicines	2,070,000	1,724,566	345,434	83%
Other	1,868,000	1,001,008	866,992	54%
FURNISHINGS	1,533,000	1,224,193	308,807	80%
Medical equipment	750,000	718,295	31,705	96%
Other	783,000	505,898	277,102	65%
CONSTRUCTION & MAINTENANCE	1,600,000	726,699	873,301	45%
Construction	1,450,000	679,129	770,871	47%
Maintenance	150,000	47,570	102,430	32%
FINANCIAL INVESTMENTS	2,585,516	305,077	2,280,439	12%
Long-term	486,500		486,500	0%
Short-term	2,099,016	305,077	1,793,939	15%
TRANSFER PAYMENTS	2,123,617	1,874,155	249,462	88%
Pensions	1,400,000	1,179,877	220,123	84%
Other	723,617	694,278	29,339	96%
OTHER	77,898	77,943	(45)	100%
TOTAL	18,808,875	13,636,504	5,172,371	73%
SOURCE: RURAL SOCIAL INSURANCE PROGRAM - ECONOMIC DIVISION, budget summary				

EXHIBIT 13
RURAL SOCIAL INSURANCE PROGRAM BUDGET BY LINE ITEM, 1993
(in thousands of current sucres)

BUDGET CATEGORY	APPROVED BUDGET (1)	EXPENDITURES (2)	BALANCE (1-2)	EXPENDITURE RATIO (2/1)
PERSONNEL	13,377,702	4,549,888	8,827,814	34%
Salaries & wages	3,848,756	1,579,823	2,268,933	41%
Benefits	9,528,946	2,970,065	6,558,881	31%
SERVICES	3,313,146	106,663	3,206,483	3%
Medical	2,570,000		2,570,000	0%
Other	743,146	106,663	636,483	14%
SUPPLIES	4,599,256	433,655	4,165,601	9%
Medicines	1,968,000	960	1,967,040	0%
Other	2,631,256	432,695	2,198,561	16%
FURNISHINGS	1,061,010	23,778	1,037,232	2%
Medical equipment	302,000		302,000	0%
Other	759,010	23,778	735,232	3%
CONSTRUCTION & MAINTENANCE	805,000	592,592	212,408	74%
Construction	750,000	590,544	159,456	79%
Maintenance	55,000	2,048	52,952	4%
FINANCIAL INVESTMENTS	304,368	1,384,969	(1,080,601)	455%
Long-term	304,368	1,384,969	(1,080,601)	455%
Short-term				
TRANSFER PAYMENTS	2,731,264	510,952	2,220,312	19%
Pensions	1,953,000	393,278	1,559,722	20%
Other	778,264	117,674	660,590	15%
OTHER	2,500		2,500	0%
TOTAL*	26,194,246	7,602,497	18,591,749	29%

SOURCE: RURAL SOCIAL INSURANCE PROGRAM - ECONOMIC DIVISION, budget summary.
* See Exhibit 15, based on a separate, detailed budget document, which shows a significantly higher total of expenditures and thus a higher expenditure ratio.

EXHIBIT 14
RURAL SOCIAL INSURANCE PROGRAM BUDGET COMPOSITION, 1989-1993
(in percentages)

BUDGET CATEGORY	1989	1990	1991	1992	1993
PERSONNEL	19.9	26.8	26.5	26.0	51.1
SERVICES	5.4	11.6	10.9	11.0	12.6
SUPPLIES	7.4	9.2	18.5	20.9	17.6
FURNISHINGS	3.7	5.6	6.1	8.2	4.1
CONSTRUCTION & MAINTENANCE	2.7	10.3	13.4	8.5	3.1
FINANCIAL INVESTMENTS	53.8	24.9	13.9	13.7	1.2
TRANSFER PAYMENTS	6.9	11.3	10.6	11.3	10.4
OTHER	0.0	0.3	0.2	0.4	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0

SOURCES: Percentages calculated from absolute totals, by category, in Exhibits 9 - 13.

EXHIBIT 15
RURAL SOCIAL INSURANCE PROGRAM BUDGET AND EXPENDITURES BY
ADMINISTRATIVE LEVEL AND PROGRAM, 1993
(in thousands of current sucres)

	APPROVED BUDGET (1)		EXPENDITURES (2)		EXPENDITUR E RATIO (2/1)
	TOTAL	PCT.	TOTAL	PCT.	
CENTRAL ADMINISTRATION¹					
Wages and benefits	1,737,606	6.9	1,317,942	7.9	76%
Other	<u>2,020,826</u>	<u>8.0</u>	<u>1,672,346</u>	<u>10.0</u>	83%
Subtotal	3,758,432	14.9	2,990,288	17.9	80%
REGIONAL ADMINISTRATION²					
Wages and benefits	1,422,669	5.6	1,239,533	7.4	87%
Other	<u>210,340</u>	<u>0.8</u>	<u>184,483</u>	<u>1.1</u>	88%
Subtotal	1,633,009	6.4	1,424,016	8.5	87%
HEALTH CENTERS³					
Wages and benefits	9,916,666	39.2	9,031,923	53.8	91%
Medicines and supplies	3,497,100	13.8	368,495	2.2	11%
Referrals to IESS hosp.	2,520,000	10.0	0	0.0	0%
Other	<u>1,831,134</u>	<u>7.2</u>	<u>977,339</u>	<u>5.8</u>	53%
Subtotal	17,764,900	70.2	10,377,757	61.8	58%
PENSION PROGRAM⁴					
Wages and benefits	129,977	0.5	116,081	0.7	89%
Pension payments	1,955,224	7.9	1,841,398	11.0	92%
Other	<u>14,898</u>	<u>0.1</u>	<u>11,636</u>	<u>0.1</u>	78%
Subtotal	2,140,009	8.5	1,969,115	11.8	92%
SUMMARY					
Wages and benefits	13,206,918	52.2	11,705,479	69.8	89%
Medicines and supplies	3,497,100	13.8	368,495	2.2	11%
Referrals to IESS hosp.	2,520,000	10.0	0	0.0	0%
Pension payments	1,995,224	7.9	1,841,398	11.0	92%
Other	4,077,198	16.1	2,845,804	17.0	70%
TOTAL	25,296,440	100.0	16,761,176	100.0	66%

SOURCE: RURAL SOCIAL INSURANCE PROGRAM - ECONOMIC DIVISION.

NOTE: This exhibit shows detailed budget balances, by code, referring to administrative levels and units, and by line item, which were prepared only in 1993, in compliance with a new government-wide accounting requirement.

¹ Budget Codes 02-06

² Budget Code 10

³ Budget Code 23

⁴ Budget Code 24 (see Note No. 2, at end of text).

NOTES

1. While Mesa-Lago's study includes some comparative data on SSC, it concentrates on the IESS medical care program for urban workers, and on the institution's management of its financial resources. Two recent publications by SSC include a book commemorating the rural program's 25th anniversary (Veloz Sancho, 1993), which is informative about SSC's early development and its organization and services delivery, and a brief historical summary that includes antecedents to SSC (Barreiro, 1993).
2. Data on the number of positions are from Exhibit 1; data on vacancies are from an internal document, signed by the SSC director (Flores, 1994).
3. The IESS wage base in 1991 was 872 billion sucres and the allocation to SSC from this source was 8 billion sucres, or 0.9 percent. This is a shortfall of 0.72 billion sucres, or 0.1 percent in relation to the 1.0 percent total contribution, shared by employers, employees, and the government, as provided for in the law (see Annex 1). For the wage base total, see IESS (1991), p. 114, Table 24; for the SSC allocations, see Exhibit 3 of the present report.
4. The GDP deflator probably is the more appropriate index for this purpose, rather than the Consumer Price Index (Exhibit 6), since we are comparing annual aggregates of budgets and expenditures rather than a basket of consumer goods and services.
5. This detailed budget, prepared only for 1993, includes central administration with five budget units (Codes 02-06), regional administration as one budget unit (Code 10), local dispensaries as one budget unit (Code 23), and pension administration and pension payments as two budget units (Codes 09 and 24). These last two units, however, show virtually identical data for staff remuneration and all other administrative line items except pension payments. One must suspect, therefore, that this represents double-counting of the administrative budget for the pension program. For this reason, only budget unit Code 24, which includes all remuneration and administrative line items, as well as pension payments, is included in Exhibit 13. If there are budget items in budget unit Code 09 that are not duplicated in Code 24, this would represent a minor amount of underreporting in this table. This adjustment, in part, explains why the approved budget total shown in Exhibit 15 is slightly lower than the total shown in Exhibit 13.
6. The respective personnel expenditure ratios, which are higher for the central and regional levels than for the health center level, appear to contradict the information on vacancies which are concentrated at the health center level. This contradiction could not be resolved during field research for this study; however, combining all these levels of remuneration yields an expenditure ratio of 89 percent which more closely reflects the overall vacancy rate (i.e. 175/1,320 or 13 percent).

INTERVIEWS

The following list includes senior SSC executives, at the central and regional level, interviewed for this study. It does not include technical specialists, working under these executives, who also provided information.

Cnrl. Fausto E. Flores D., Director Nacional del Seguro Social Campesino

Lic. Lourdes Baquero, Coordinadora, Centro Regional 1

Dr. Pedro Isaac Barreiro, Jefe, Departamento Nacional de Atencion de Salud

Lic. Jose Bustillos, Jefe, Departamento Nacional de Personal

Arq. Wilson Cardenas, Jefe, Division Nacional de Prestaciones

Abog. Isidro Cedeno Erazo, Coordinador, Centro Regional 6

Dr. Cesar Cordova, Jefe, Departamento Nacional de Programacion de Salud

Lic. Cristobal Freire, Jefe, Departamento Nacional de Contabilidad y Presupuesto

Abog. Carlos Herdoiza, Jefe, Asesoria Legal

Lic. Nilo Macias, Jefe, Division Nacional Economica

Lic. Antonio Montalvo, Jefe, Departamento Nacional Informatico

Dr. Guillermo Ortega, Jefe, Departamento Nacional de Abastecimiento

Lic. Eloy Palacios, Coordinador, Centro Regional 3

Lic. Luis Tulcanaza, Jefe Encargado, Departamento Nacional de Promocion Social y Calificacion de Derechos

Dr. Rodrigo Vinan, Jefe, Division Nacional Medica

Financial and other legal requirements that bind SSC to IESS were reviewed with Lic. Maria Caizapanta Vega, Revisor 5, Intervencion, Supervisoría General, IESS.

SOURCES

Primary data sources are given in the statistical tables and Annexes; other first-hand information was obtained from senior SSC executives who are listed in Interviews. Other sources cited in the text include the following:

Barreiro, Pedro Isaac, *El Seguro Social Campesino: Apuntes para su Historia* (Quito: SSC, 1993).

Bayo, Francisco R., "Informe de la Valoracion Actuarial del Regimen de Enfermedad y Maternidad," IESS, Quito, July 1993.

Flores, Fausto, "Propuesta del Organico del Seguro Social Campesino," no date (probably July 1994), internal SSC document.

IESS, *Memoria 1991*, Quito, 1991.

IESS, *Seguro Social Campesino: La Legislacion Actualizada al 15 de Junio de 1992*, Quito, 1992.

IESS, Consejo Superior, "Resolucion No. 824," July 12, 1994 (Reorganization of IESS).

Lalama Hidalgo, Laura, "Valuacion Actuarial del Seguro de Invalidez, Vejez y Muerte," IESS, Quito, December 1993.

Mesa-Lago, Carmelo, *Instituto Ecuatoriano de Seguridad Social: Evaluacion Economica y Opciones para Reforma* (Quito: INCAE, 1993).

SSC, *Boletin Estadistico 1991*, in press.

Veloz Sancho, Indalide, *25 Anos del Seguro Social Campesino* (Quito: IESS, 1993).